



	A SYSTEMATIC REVIEW: COVID-19 AND EXPANSION OF
	PESTLE FRAMEWORK: TIME TO PERCEIVE HEALTH
	ENVIRONMENT AS A SEPARATE DIMENSION
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Article History:	Abstract:
Received: YY-MM-DD	The article uses macroeconomic concepts to explore the impact of the COVID-
Revised: YY-MM-DD	19 pandemic on the global economy. Further, organizations worldwide can use
Accepted: YY-MM-DD	the strategic management technique of drawing up a PESTLE analysis to focus
	on each factor and macroeconomic party, which ultimately comprises the entire
	economy, focusing on the expansion of the environmental factor. The study
	sought to determine whether healthcare should be considered as a separate
	dimension under the environmental category in a PESTLE analysis as seen by
	the effects of the current pandemic and, if so, what the arguments in favor and
	against were. The methodology was used to gather data from online journals
	relating to the relevant healthcare ministries, and a comprehensive review was
	conducted based on existing sources. The scenarios unfolded as the pandemic
	first broke out, the policies imposed by governments and shortcomings as
	policymakers were discussed, and the current policies utilized to ensure the
	brunt of the pandemic did not boomerang again were analyzed. This research
	article concludes with the results of the COVID-19 pandemic; healthcare can be
	considered a separate dimension of the environmental factor in PESTLE
	analysis, which directly influences the macroeconomy.
	Keywords: Planning, Covid-19, PESTEL, Economy

## **INTRODUCTION**

Today's organizations confront difficult economic conditions, exacerbated by the recent global financial crisis and mounting evidence of catastrophic climate change occurring at an unprecedented and fast rate. International and domestic companies are being forced to rethink their strategy. They must evaluate their organization's expenditures and realign their objectives to strategically choose the most cost-effective cost reduction. (2010) (Issa et al.). However, individuals have broadened their framework throughout time to include demographic, intercultural, ethical, and ecological considerations, resulting in variations such as STEEPLED, DESTEP, and SLEPIT (Administrator, 2016).

PESTLE analysis is a term that is often used and is sometimes abbreviated as PEST analysis. It is a notion found in marketing concepts. Organizations utilize this idea to keep track of the external variables affecting them. This study is then contrasted with the company's internal strengths and weaknesses using a SWOT analysis, which assists in defining the future scope of action and creating strategic management strategies. A PESTLE analysis is often used as an exhaustive, comprehensive fact-finding exercise that assists an organization in determining the external variables that may affect internal choices. By recognizing the external variables' effect on an organization, businesses can align their goals with their resources, all while allowing sufficient planning time to account for possible roadblocks to such strategies. They may devise ways to mitigate risks and enhance their chances (Pathak R., 2021). Similarly to what was stated before, this idea may also be used in a macroeconomic context.





Macroeconomics is the field of economics that examines an economy's behavior and performance. Macroeconomists are interested in aggregate economic developments such as unemployment, growth rate, Gross Domestic Product (GDP), and inflation. They examine the economy's aggregate indicators and the microeconomic variables that affect them. Governments and businesses rely on macroeconomic models to assist them in developing economic policies and strategies (The Economic Times, 2021).

A PESTLE analysis report is a valuable tool to have on hand before beginning the company planning process. This document offers the senior management team a wealth of contextual information about the firm, such as the business's strategy, brand positioning, growth goals, and areas of concern that may decrease growth and productivity. A PESTLE study enables companies to detect potentially disruptive changes to their business models that may significantly affect the future employment environment. Organizations are undergoing significant personnel transformations. Increased skill gaps, the development of employment positions that did not exist a decade ago, such as the IT department, and job cutbacks or displacements are just a few of the most noticeable changes in sectors over the last few years. PESTLE research elicits a wealth of data about external variables and critical market insights.

Spending time developing a PESTEL study may help prioritize company efforts to achieve marketing goals within a specified period.

Additionally, PESTLE research provides critical market insights into how consumers react to a product or service. This enables companies to make informed decisions about whether to join or exit a market, how to alter an existing product, and when and what to launch as a new product. A PESTLE analysis is an effective technique for determining the context for change and concentrating efforts on the areas critical to the success of that change. PESTLE analysis works well in conjunction with a SWOT analysis in this instance. This enables a company to assess possibilities and risks associated with labor developments, such as talent shortages and workforce skills (Pathak R., 2021).

The epidemic poses grave risks to physical security, economic security, and institutional confidence. These risks may affect cognitive, emotional, and behavioral consequences associated with financial decision-making, political conduct, and how others are treated. Perceived threats to health/safety, economic well-being/status, and social group memberships such as identity, race/ethnic groups, and so forth can result in either a narrowing of concern for others (increased egocentric, self-protective thoughts and behaviors) or an expansion of concern for others (increased other-focus, altruistic and pro-social thoughts, and behaviors). Additionally, these threats may foster hostility against people seen to be beyond one's circle of care (RSF, 2020).

**Objective of the study.** This study aims to identify whether the pandemic included health as a new dimension in environmental factors along with the PESTLE framework.

Components of PESTLE. The PESTEL framework is a "mnemonic used in strategic management to aggregate macro-environmental variables to assist strategists in identifying broad opportunities and dangers." The PESTEL framework examines the external business environment to understand better the 'big picture' in which the organization works, allowing it to capitalize on opportunities and mitigate risks associated with its business operations (Issa et al., 2010). PESTLE is a Political, Economic, Social, Technological, Legal, and Environmental mnemonic. This may be limited to PEST or other categories might be included, depending on the company (such as Ethical). The PESTLE analysis is a considerably more in-depth variant of the SWOT analysis (Pathak R., 2021).

Reviewing each component of the PESTLE factors. P - Political factors include government rules and legal requirements that organizations must follow. Companies must regard their home country's laws and regulations from a political standpoint. (Issa, Chang, & Issa, 2010). Tax policy,







environmental laws, trade limitations and reform, tariffs, and political stability are all considered political issues. These variables affect the degree to which a government may influence an industry or a business. For instance, the government may enact new tax changes that alter a business's revenue-generating structure. Customs policy and export subsidies are two examples of tariff trade barriers that may burden a company's operations. Meanwhile, non-tariff trade obstacles include establishing minimum import prices and export prohibitions and limitations (Pathak R., 2021).

This includes government policy, political stability or insecurity, corruption, foreign trade policies, tax policies, labor laws, environmental laws, and trade restrictions. Additionally, the government may significantly influence a country's education system, infrastructure, and health laws. All these variables must be considered when determining the market attractiveness of a prospective market (Administrator, 2016).

E – The economic element is linked with the organization's cost concerns (Issa et al., 2010). Economic variables include economic growth/decline, interest rates, currency exchange rates, inflation and wage rates, minimum wage, working hours, local and national unemployment, credit availability, and cost of living. These variables are essential drivers of an economy's success since they directly influence a business and have long-term repercussions. For instance, an increase in any economy's inflation rate would affect how businesses price their products and services. Such hypothetical conduct would likewise impact consumer buying power and may shift the economy's demand/supply dynamics (Pathak R.,2021). Economic variables influence the performance of an economy.

S - The social element affects how businesses evolve (Issa et al., 2010). Cultural standards and expectations, health awareness, population growth rates, age distribution, career aspirations, and health and safety are all examples of social variables. This component of the general environment reflects the demographic, normative, customs, and values characteristics of the organization's population. This covers demographic factors such as population growth rate, age distribution, wealth distribution, career attitudes, a focus on safety, health awareness, lifestyle attitudes, and cultural obstacles. These characteristics are particularly critical for marketers when they are targeting specific consumers. Additionally, the social component paints a picture of the Indigenous labor and their willingness to work under adverse circumstances (Administrator, 2016).

These variables enable businesses to design their marketing analytics and strategy more effectively. For instance, the Indian market often experiences a spike in car demand towards the end of the year owing to the holiday season. These characteristics are especially relevant for marketers attempting to target specific consumers. Additionally, they emphasize Indigenous labor and their willingness to operate under specific conditions (Pathak R., 2021).

T - This technology achieves exceptional performance at the lowest possible cost, and a firm may always transfer its business to a competitor providing superior service or cheaper costs" (Issa et al., 2010). Technological aspects are advancements and breakthroughs in technology. These variables influence an organization's operations.

Numerous new advancements in the technological sector, such as Artificial Intelligence (AI), Internet of Things (IoT), Machine Learning, and Deep Learning, are being created. If businesses keep up with the trend, they will retain market share. The PESTLE study considers a variety of technical variables, including the pace of technological development, the evolution of infrastructure, and any government or institutional research (Pathak R., 2021).

Additionally, the 'technology' component encompasses technical incentives, the level of innovation, automation, research and development (R&D) activities, technological change, and the degree to which a market has technological awareness. These variables may affect choices to join or







exit certain sectors, launch or discontinue specific goods, and outsource manufacturing operations to other countries. By staying current on technological developments, your business may be able to avoid spending a significant part of its budget creating a technology that will become outdated very quickly due to disruptive technical advancements elsewhere (Administrator, 2016).

- L Changes in law affecting employment, access to materials, quotas, resources, imports/exports, and taxes are all considered legal considerations. These variables have both external and internal components. Specific laws influence a country's business climate. Apart from these laws/rules, businesses have internal rules and regulations that employees must follow. Thus, the legal analysis considers both perspectives and formulates solutions accordingly (Pathak R., 2021). While some of these variables overlap with political considerations, they include more particular legislation, such as anti-discrimination laws, employment regulations, consumer protection laws, copyright and patent laws, and occupational health and safety laws. It is self-evident that businesses must understand what is and is not lawful to do business effectively and ethically. When a business operates worldwide, this gets much more complicated since each nation has its laws and regulations. Additionally, the firm should be informed of any possible changes in law and their effect on future operations. Nowadays, most companies maintain strong ties with their legal departments.
- E With increased awareness of environmental problems aggravated by the escalating pressure of climate change campaigners, businesses are increasingly expected to play a more active role in achieving sustainable development. However, defining this new position is a significant problem for businesses, as they must balance economic, environmental, and social performance. Managers must quantify the relationship between environmental activities and financial performance to incorporate sustainability concepts into their company plans and to assist in resource allocation choices (Issa et al., 2010). These elements primarily address the surrounding environmental effects and ecological factors. These include regulations governing trash disposal, environmental preservation, and energy usage, to mention a few.

This component of the PESTLE is critical for specific sectors, most notably tourism, agriculture, and farming. Global warming and the increased need for sustainable resources and ethical sourcing (locally and nationally, including supply chain intelligence) have forced every business to address environmental issues. Corporate Social Responsibility (CSR) has been mandated for businesses (Pathak R., 2021)

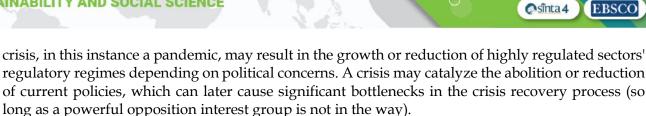
Environmental issues have just lately gained prominence. They have grown in importance because of the growing scarcity of raw resources, government-set pollution goals, and carbon footprint objectives. These variables include ecological and environmental issues such as weather, climate, environmental offsets, and climate change, which may disproportionately impact tourism, agriculture, and insurance sectors. Additionally, increasing knowledge of the possible consequences of climate change affects how businesses function and the goods they provide. This has resulted in an increasing number of businesses engaged in CSR and environmental initiatives (Administrator, 2016).

The impact of COVID-19 on Environmental factors. Political. Alcohol, marijuana, and other controlled substances are a handful of the heavily regulated markets in the United States. Market circumstances change results in more creative, entrepreneurial solutions in less regulated marketplaces.

In these highly regulated markets, the rapid changes brought about by the pandemic and associated actions offer a window into the intertwined political interventions that occurred when governments altered several regulations influencing ease of entry. We demonstrate how a similar







The epidemic brought to light flaws in the regulatory framework governing prescription and illegal medications. By increasing access to drug use disorder treatment, deregulation efforts mitigated the harmful consequences of increased substance use during the epidemic. However, as drug usage grows, more negative consequences emerge. Domestic violence, child abuse, and assault all decrease in response to an increase in the price of alcohol. The meta-analysis quantifies the statistically significant and economically significant impacts of alcohol pricing on injury outcomes, violence, traffic accidents, STDs, criminality, and other drug usage. Although violence-related injuries and damage increase when alcohol and other drug use increases, policymakers struggle to manage a complicated regulatory system beset by special interests and information gaps enmeshed in politics. Simplifying consumer access to high-quality goods by enabling entrepreneurs to supply customers with the items they want and simplifying access to treatment for individuals struggling with drug use disorders will almost certainly enhance several public health outcomes (Redford & Dills, 2021).

Although clerics in Iran have cooperated in advising communities to remain at home, adhere to the government's lockdown policies, and perform religious obligations such as Friday prayers at home, most people have heeded their advice despite their vocal discontent with such a request. The Irani administration's contradictory stance was that the public did not engage in a suppression campaign, and the government did not prohibit visits to pilgrimage sites. This resulted in the fast spread of COVID-19 across Iran's regions due to the government's ineffective measures to prevent disease transmission.

The most notable feature is that this problem was first contained, then handled and controlled only after the bulk of the harm had been done. The second difficulty was diagnosing individuals with the illness; those with positive Polymerase Chain Reaction (PCR) tests were deemed halo, but those with symptoms were not reported on Computed Tomography (CT) scans, resulting in a disparity between official and accurate data (Lebni et al., 2020)

COVID-19 has had a significant impact on national and international politics. Due to the emergence of the COVID-19 virus, certain governments/ruling parties seemed very concerned, while others exploited the epidemic as an opportunity for political advantage. Numerous industrialized and developing nations swiftly proclaimed national health crises in response to the recommendation of competent medical experts. According to the United Nations Centre for Civil and Political Rights report, 84 nations have declared a state of emergency in response to the epidemic. Additionally, the study notes that certain nations' governing parties abuse government machinery for political advantage by severely prohibiting large protest movements. Certain nations' democratically elected leaders become authoritarian by using their powers. Reporters Without Borders notes that 38 nations worldwide have limited press freedom, that reporters face verbal assaults in the United States and Brazil, and that some journalists have been imprisoned in countries such as Algeria, Jordan, and Zimbabwe. COVID-19 also affected the elections in several nations across the globe. According to the International Foundation for Electoral Systems (IFES), 61 nations and eight territories have postponed their elections, totaling 106 elections postponed due to COVID-19 (Reports of IFES, 17th June 2020). The eruption of COVID-19 also generated significant tensions in international politics. Numerous impediments have arisen in some nations' foreign ties because of the virus's propagation.

ROAD

Clariva



Tensions between the world's two largest economies, the United States and China are at an all-time high following the American government's criticism of the Chinese government's disaster management procedures in the aftermath of the disease outbreak, which the Americans claimed originated in a laboratory in Wuhan, China. Additionally, Donald Trump, then-President of the United States of America, notoriously called the COVID-19 virus the 'Chinese Virus,' disregarding objections from social activists who felt the conduct was pitiful and discriminatory.

Donald Trump has vowed to sue the Chinese government for damages caused by the epidemic. The Chinese authorities vehemently denied ex-President Donald Trump's claim and blamed America for this epidemic's emergence. China's Ministry of Foreign Affairs has said unequivocally that the American military is to blame for the COVID-19 outbreak (The Hindu, 9th May 2020). China has received criticism from several nations other than America due to the viral epidemic, including Brazil, Australia, and France. According to Brazilian politician Eduardo Bolsonaro, the Chinese Communist Party is responsible for the worldwide COVID-19 epidemic." (M. Pathak, 2020)

The revelation of the first case of COVID-19 in Sri Lanka in March 2020 prompted the government of Sri Lanka to immediately implement a cautious policy reaction and lockdown the whole nation, with the primary goal of limiting people's mobility to safeguard lives from the virus's potential effect on individuals with comorbidities. The strategy effectively contained the epidemic since the number of reported cases and fatalities was minimal. However, the program had a detrimental effect on the economy. By examining monthly data in a univariate modeling framework, this research determined that the pandemic impacted the country's export and import commerce in March, April, and May 2020. Extending the research to a second wave that may conclude in December 2020, the study predicts that the country's total exports and imports will decline by 67% and 45%, respectively, as the pandemic disrupts the behavioral patterns of the country's various export and import components. The government's passive reaction to the second wave of COVID-19 aimed to sustain economic activity during the epidemic. If, on the other hand, the strategy results in a pandemic spread at the community level, a massive and prolonged negative impact on international commerce and the economy will be generated as the virus's life span becomes infinite, having a more lasting influence on the economy. (2021, Bandaranayake)

**Economical.** The Iranians' insufficient financial capacity to safeguard the country during quarantine resulted in the loss of livelihood for many individuals who usually earn their living and stay active in numerous busy areas and commercial hubs.

Given Iran's present economic slump, spending a part of the budget to address the current COVID-19-induced problem risks luring the nation into another future crisis in the supply chain for essential commodities. Further depletion of foreign currency reserves, more unemployment, and ultimately more significant inflation.

Among the other essential factors covered in this category is the health sector's credit limit for delivering medical equipment (Lebni et al., 2020). Job losses accelerated to levels not seen since the Great Depression, with economic production expected to decline more than during the Great Recession of 2008/2009 in the first two quarters of 2020. Congress enacted substantial stimulus legislation, but it needed to be improved in light of the fraying social safety net, which left millions of families struggling to make ends meet without paid sick/family leave or health insurance. (Royal Society for the Prevention of Cruelty, 2020).

Additionally, government-sponsored research assessing the economic effect of COVID-19 projected that this pandemic would hurt the lives and livelihoods of the Assamese people. Around half of the state's population will fall below the poverty level due to this worldwide catastrophe.







According to this study on Assam's economy, about 67,000,000 people would have difficulties earning a living. Additionally, this study said that Assam's unemployment rate would quickly rise due to the virus. Additionally, the economy's unemployment rate will rise to 27% from its current level of 8%. (Pathak M., 2020).

Regarding the economy and community well-being, the Sri Lankan government announced a stimulus package for SMEs, for which the government set aside a budget of LKR50 billion (approximately USD 270 million). The stimulus package included a working capital loan of up to LKR 25 million (about USD 135,000), aimed at businesses with yearly revenue of less than LKR 1 billion (approximately USD 5.4 million). When nearly 45,000 private sector companies applied for the loan, the government recognized that the LKR 50 billion allotments needed to be increased to satisfy demand. Consequently, the government increased the budget allocation to LKR 150 billion (approximately USD 810 million).

However, a study of stimulus packages given in 18 other countries reveals that the GoSL's stimulus program needed to be revised compared to an average of 3.5 percent of GDP allotted for stimulus packages in other nations (Amaratunga et al., 2020).

Apart from that, SMEs' income tax arrears have been partly forgiven, payment conditions have been eased, and legal proceedings against non-payers have been halted. Similarly, the government enacted a loan repayment moratorium, which included a six-month moratorium on debt repayment for impacted industries such as tourism, textile, plantation, and information technology, as well as small and medium-sized enterprises. As stated, the Government of Sri Lanka also offered a LKR5000 stipend to low-income families and economically vulnerable populations such as daily wage workers. Additionally, the government set a maximum retail price for some essential goods and a fund to stabilize gasoline prices. (Jayasinghe, Amaratunga, Fernando, Haigh, & Amaratunga, 2020)

The pandemic has significantly disrupted the usual temporal pattern of export value, with shipments falling 34% in March 2020 compared to the previous month and 57% in April. March and April's export values decreased by about 71% compared to February 2020. The export volume index, which measures the country's overall exports, significantly dropped in March and April before gradually recovering.

Adopting a solid strategy to safeguard economic activity may be risky since it would amplify the pandemic's spreading impact. The second pandemic wave shows the epidemic has spread across the population, resulting in daily reports of more cases and fatalities. Community spread will, of course, lengthen the virus's lifetime and the duration of the shock, resulting in a lasting negative effect on the economy (Bandaranayake, 2021)

**Social.** Although most individuals followed self-quarantine measures at home, empathy and closeness evolved more among family members. However, these social variables undermined family ties, resulting in increased psychiatric disorders and violence by fostering interpersonal, verbal, and physical conflict.

Additionally, prolonged confinement to one's house may result in melancholy, lethargy, and aggravation of pre-existing diseases such as hypertension, stress, and anxiety. The second social issue is an insufficient intake of antiseptics at home, which results in additional complications, such as respiratory system impairment. People have responded to this epidemic and developed an increased sensitivity to their interactions with other individuals in general (Lebni et al., 2020)

To demonstrate the systemic nature of risk, the COVID-19 pandemic quickly evolved from a health catastrophe to a social and economic disaster, resulting in many negative economic and social consequences nationwide. For example, Sri Lanka's GDP, anticipated to grow at a pace of 4.5–5% after the Easter Sunday assault in 2019, was forecast to grow at just 2.2 percent when the epidemic







struck the nation. Additionally, the lockdown hurt the country's critical economic sectors, notably manufacturing and services. To elaborate, the tourism industry, a critical service sector in the nation, accounts for about 5% of GDP. However, because of the global travel restrictions implemented during the pandemic, tourist arrivals in the nation dropped by 71% in March 2020. They were non-existent in the following months: April, May, and June. Similarly, the manufacturing sector's Purchasing Manager's Index (PMI), which was at 54 in January 2020, fell to 24.2 in April 2020 due to a decrease in new orders, output, and employment. Additionally, industrial exports decreased by 74% yearly, while agricultural exports decreased by 32%, damaging the country's export profits. (Jayasinghe, Amaratunga, Fernando, Haigh, & Amaratunga, 2020)

Additionally, private remittances sent to Sri Lanka by migrant workers contribute substantially to the country's foreign currency profits. For example, private remittances provided by migrant workers accounted for 63% of the country's overall export profits. However, employee remittances dropped by 32% in April 2020, dampening the country's foreign currency revenues. (Jayasinghe, Amaratunga, Fernando, Haigh, & Amaratunga, 2020)

Similarly, a recent labor market study of 2764 private sector businesses showed that throughout the pandemic period, 1465 establishments were closed entirely, 1025 companies operated at or near-maximum capacity, and just 94 establishments operated at total capacity. Of the businesses surveyed, 1084 could not pay their employees' wages throughout the country's epidemic. Increased unemployment, job insecurity, and wage cutbacks all contributed to worry and economic stress among the working people in the economy. (Jayasinghe, Amaratunga, Fernando, Haigh, & Amaratunga, 2020)

The pandemic had a devastating effect on SMEs and the informal sector, especially daily wage workers. To illustrate this argument, most SMEs in Sri Lanka have faced problems due to a lack of supplies required to continue manufacturing or service supply, decreased domestic and worldwide demand for their goods, and difficulty repaying loans (Amaratunga et al., 2020).

One of the most urgent concerns about the pandemic's social consequences is the interruption of educational activities. Lockdown limitations imposed in response to social distancing demands led to the closure of elementary, secondary, and tertiary educational institutions such as schools, universities, and support courses. The GoSL responded by promoting the continuation of online educational offerings. While online education would have been the simplest solution, the pandemic exposed an issue: it widened inequalities in access to education and fuelled social unrest because certain population groups, particularly those living in rural areas, lacked access to the facilities and infrastructure required for online learning. (Jayasinghe, Amaratunga, Fernando, Haigh, & Amaratunga, 2020).

Another significant social consequence is the stigmatization of demographic groups exposed to the public. Certain population groups, namely health sector workers and those who worked at supermarket counters, were stigmatized in their communities since they provided essential services despite the country's pandemic and were therefore seen as potential disease carriers (Amaratunga et al., 2020).

**Legal.** The absence of private sector involvement in providing semi-clinical services (laboratory and radiography) in outpatient units and inpatient wards for patients with COVID-19 in hospitals shows a need for more precise and defined regulations. Additionally, the public's inappropriate and imprudent use of disinfectants in the city, along with the absence of adequate monitoring by authorized people, harms the environment and destroys public property such as machines and ATM cards (Lebni et al., 2020)





# **METHODS**

The study adopted a systematic review that used specific techniques to locate, select, and critically appraise relevant primary research on an established topic. The findings were then used to extract and analyze data from the included studies (Aromataris, 2014). The systematic review presents previous work that describes and evaluates the research examined but does not provide a process for how the studies were discovered, chosen, and evaluated. Instead, an overview, a discussion of previous studies, and a critique of the gaps in existing knowledge that researchers often use to explain the new findings to focus on interventions of various kinds (Denyer, 2009).

The researcher used the qualitative method to explore the PESTEL framework. Qualitative research is usually used to understand human lives and the social world by addressing questions concerning the experience and dimensions. Subjective meanings, actions, and social contexts are the main ideas in qualitative research (Fossey et al., 2002). To study the impacts of the environmental factors on the PESTEL framework, the researcher selected existing pieces of literature on PESTEL framework studies before and after the global pandemic. For a systematic review, many studies must be retrieved. Even articles that do not have abstracts must be addressed in such a scene. Taking the quantitative studies into a systematic review is time-consuming. However, conducting a systematic review and meta-synthesis of qualitative research studies is rewarding but demanding, and adequate time and resources must be available. Some recommendations have been made that may facilitate such processes (Jones, 2004). Business, news websites, global business, project reports, databases, and journal articles published in English on Google Scholar, Research Gate, and SAGE publications were reviewed for the qualitative studies. Keywords such as PESTEL, environmental factors, business impact, COVID-19 and business, and pandemic and health selection criteria were used to choose the data source analyzed with the keywords. Then, the researcher significantly analyzed only the environmental factor in the PESTEL framework to fulfill the study's objective.

## RESULT AND DISCUSSION

PESTLE Framework - External Environment Scanning & Impact of COVID-19 on the Environment. Social isolation, remote work, and the difference between "essential" and "non-essential" employees have had varying impacts on workers based on their gender, race/ethnic origin, education level, and profession. The most vulnerable have faced more significant dangers, including low-wage employees, the elderly, those with chronic health problems, and those living in close quarters, such as jails/prisons or immigration detention centers. Many low-wage service employees are likelier to lose their employment permanently or be called back to work more slowly than higher-wage workers in other sectors. The epidemic abruptly halted the standard social contact patterns that drove economic and social activity. Most of the population has suffered interruptions in their daily rhythms because of enforced social distance, with the possibility of more disruptions in job, school, social, and family connections. As a result, the infrastructures of education, health, social services, faith-based organizations, government, criminal justice, and the law were obliged to change their operations quickly, bringing some online, delaying or postponing others, and closing others entirely. Although the effects of these choices are unknown at the moment, they are likely to be long-lasting, partly owing to disparate access to digital technologies (RSF, 2020).

COVID-19 factors connect directly with the mental health of ordinary people on one end of the illness, but there is a grave concern that thousands of fatalities occur on the other. The COVID-19 epidemic has had a detrimental effect on the economy, with many people losing employment and being unable to earn a living wage. Fear of economic loss has heightened stress levels and contributed to mental health issues among individuals globally (Lebni et al., 2020). Iran's





government, for example, has implemented preventive measures and regulations to reduce public concern about addressing mental health issues. Iran's government created dedicated health facilities to treat individuals infected with COVID-19 after they were discharged from significant hospitals. This motivation aided in separating COVID-19 patients from their families until they recovered utterly, thus preventing the fatal illness from spreading further.

The government promised to postpone utility payments for three months, and paying in installments comforted patients' families, thus alleviating mental stress (Lebni et al., 2020).

The authorities made a concerted effort to alleviate worry, tension, and mental health problems by implementing essential measures. The government has established programs to reward contributors who provide financial assistance to disadvantaged and low-income people. Through this government-sponsored program, online and telephone psychological therapy services for patients infected with COVID-19 and other healthy individuals are beneficial. This has aided in the alleviation of the community's emotional tension. The government has begun offering low-interest loans to low-income individuals. It has taken control of social media sites to detect and restrict the dissemination of sensational and misleading material regarding COVID-19 illness. This aided the community's management of the fear generated by false information regarding COVID-19 (Lebni et al., 2020).

Through mental health surveys, the government initiated social support programs and psychological protocol services for survivors of COVID-19. To combat dread and terror in society, plans were started to disperse public gathering places and educate the people via the media. The government established specific post-moratorium services for those who died as a direct consequence of the illness, recognizing that funerals are an essential cultural component in every community. The government initiated initiatives to educate the public about the disease's progress and to alleviate communal mental stress. The protective measures aided in the development of confidence in individuals, enabling them to overcome fear, anxiety, stress, and mental health issues (Lebni et al., 2020).

The health experts recommended solutions to slow, sustain, and overcome COVID-19 transmission problems. These included prioritizing investment in the health sector over other sectors, such as military spending, allocating subsidies to all citizens with private businesses, and providing low-interest loans to relatively larger SMEs. They also recommended paying particular attention to the virus (Lebni et al., 2020).

The COVID-19 pandemic is a public health emergency that triggered an economic catastrophe, with employment losses exceeding job increases over the preceding decade within a few months and severe impacts on many aspects of American society. The disparate responses of institutions such as government, education, and industry aided in the virus's unequal transmission and impacts by location, race, ethnic origin, gender, and social status (RSF, 2020).

The pandemic of 19 had a significant effect on people's mental health. As with the rest of the globe, the people of Assam experienced sadness, frustration, anxiety, and lack of appetite during the national lockdown, which contributed to the state's fast rise in mental health-related cases. Dr Sangeeta Datta, a psychiatrist based in Guwahati, said that the economic crisis is the primary reason for the rapid increase in mental health-related cases in Assam (Pathak M., 2020).

**Healthcare & Macroeconomics.** The rise in healthcare costs is a sobering problem for developing economies. This is because an unchecked rise in healthcare costs could drive developing/underdeveloped countries into severe poverty. Increases in public healthcare costs could be attributed to an increase in deaths from diabetes, cardiovascular disease, and cancer, which could result in a crisis in emerging economies because of the growing demand for specialized





equipment and training of experts to detect and treat the illnesses (Zhou et al., 2020). Additionally, the research indicates that labor force participation influences public health expenditures.

A possible reason is that when a country's labor population is fully employed, some occupations, such as mining and other sectors, expose their employees and nearby communities to health risks that may result in illness and frequent trips to the health facility. When this occurs, it puts pressure on the government and relevant stakeholders to expand hospitals, which results in increased healthcare spending and vice versa, with the premise that all other variables remain constant (ceteris paribus).

The findings of this research match those of a study conducted in the United States of America, which found that changes in the labor market and health workforce result in an increase in government healthcare expenditure (Zhou et al., 2020).

On the one hand, the findings suggest that inflation hurts healthcare expenses in developing economies. This implies that, although negative inflation is not a good thing for the economy in general, the impacts on healthcare may not result in a rise in healthcare expenses since the prices of health-related products and services are not rising. The negative connection between healthcare costs and inflation implies that the monetary value of healthcare expenses is constant or falling since inflation does not increase prices but somewhat decreases them. On the other hand, the likelihood of inflation negatively influencing overall economic development is apparent, which may constrain revenue sources for the health system, eventually resulting in higher health expenses (Zhou et al., 2020).

This research indicates that macroeconomic variables directly affect healthcare costs since a country's income level rise enables governments to raise revenue via taxes. Inflation affects public healthcare expenses because it influences the pricing of products and services, particularly the costs of health-related materials. While labor force participation may enhance the government's revenue base, some occupations expose employees and the broader population to health risks, resulting in higher healthcare costs. This implies that the cost of public healthcare in developing countries is directly or indirectly related to macroeconomic variables (Zhou et al., 2020). COVID-19 had a detrimental effect on the macroeconomy because of the rise in health care costs, which directly influenced the rise in health care costs, which directly influenced a country's GDP.

How COVID-19 is driving up healthcare costs. According to a recent Kaiser Family Foundation research, many insurers anticipate a rise in health expenditures this year because of pent-up demand after delayed care, direct costs associated with COVID-19 diagnosis and treatment, and vaccine costs.

According to a second study from McKinsey & Company, although the direct impact of COVID-19 has already been significant, further layers of delayed or indirect impacts have the potential to dwarf the immediate effects, culminating in an extra yearly cost to the American healthcare system of \$125-\$200 billion. For example, the study estimates that the average cost of treating a chronic obstructive pulmonary disease patient may rise between 7% and 11%, from about \$38,000 to nearly \$41,000 per patient per year. This cost rise is mainly due to an anticipated increase in the intensity of a patient's symptoms due to delayed treatment (Carson, 2021).

Health sector specialists in the United States have extensively studied the devastating effects of the COVID-19 epidemic and subsequent economic crises on healthcare use, expenditure, and employment. A historic drop in healthcare expenditure and substantial job losses occurred mainly during the first two months of the pandemic, partly due to preventative measures taken by governments and health systems to halt in-person discretionary and elective treatment. As the USA remained quarantined to prevent the spread of COVID-19 and free up healthcare resources to treat





new COVID-19 patients, health expenditure and employment fell by 24% and 10% in April 2020, compared to only two months before. "Since that time, our team has been carefully monitoring the recovery of health care expenditure and employment, and we have seen that health employment has virtually returned in many settings/categories of care, and health spending growth rates seem to be returning to pre-pandemic levels" (Rhyan, 2021).

### **CONCLUSION**

This study paper only evaluated whether the PESTLE analysis can be reformed to include healthcare as a new component. After thoroughly analyzing the above data, we can conclusively provide an ultimatum that the healthcare entity can be classified as a separate dimension under a PESTLE analysis based on its significant impact on the macroeconomy.

Hypothetically speaking, even if we ignore the pandemic's contribution to the healthcare industry, healthcare is one of the most vital industries in any economy. One could even go as far as to make a statement that in the absence of a smoothly functioning healthcare system, the full functionality of an economy would come to a grinding halt as bottlenecks would be formed where consumer goods/services would be stagnant in the flow of production due to the absence of human labor, which is an essential part of the production process. If we were to consider an act of God, such as a pandemic, the economy would plunge into chaos in a couple of days if not for a smoothly functioning healthcare system.

Although healthcare would be introduced as a sub-part of the existing environmental factor, the PESTLE analysis would completely restructure as a new factor impacting the macro economy is introduced. The inclusion of this new dimension would have a direct impact on other existing factors such as the political factor, social factor, technological factor, economic, and, most importantly, legal factors, as the impact this new introduction has on the macroeconomy should be accounted for in order to provide a more realistic & practical view of how entities such as corporations & even global governments tackle external shocks which affect the macroeconomy.

In conclusion, as per the findings of this research article, the researcher is most definitely considering including all healthcare-associated costs in a PESTLE analysis under the environmental factor in the future.

Economies tend to perform better when functioning healthcare systems exist, so introducing this new dimension will only amplify the healthcare system, which is already quantifiable in its impact on the macroeconomy's overall functionality.

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